The People's Republic of China's Current Nuclear Potential

| Systems | ICBM / SLBM | IRBM / SRBM | Bombers / Ground Attack Fighters | Total Nuclear Weapons | Total Tons of Weapon Material | Potential number of Weapons |
|---------|----------------------------------|---|--|--|--|---|
| | 24 DF-5 (CSS-4) ICBM | 60-80 DF-3A (CSS-2) IRBM | 90+ H-5 (IL-28 Beagle) | 32-48 ICBM Warheads | 20 tons Highly Enriched Uranium (HEU) | 1212-2000 HEU Nuclear Weapons |
| | 8 DF-31 (CSS-9) ICBM | 60 DF-21 (CSS-5) IRBM | 140 H-6E/F/H (TU-16 Badger) | 12-24 SLBM Warheads | 4.4 tons Plutonium (PU) | 550-1955 Pu nuclear weapons |
| | 12-24 JI-1 (CSS-N-3) SLBM | 20+ DF-4 (CSS-3) IRBM | 18 H-6D (TU-16 Badger) | 140-320+ IRBM Warheads | | |
| | | 550+ DF-7 (CSS-8) SRBM 200+ DF-11A (CSS-7) SRBM 160+ DF-15 (CSS-6) | 330+ Q-5 (MIG-19) | 120-300+ SRBM Warhead 130+ Airdropped Bombs | | |
| Total: | 44-56 ICBM / SLBM Missiles | SRBM 140-160+ IRBM 766+ SRBM | 248+ Bombers 330+ Ground Attack Fighters | 434-822+ Nuclear Weapons | 24.4 tons of Weapons Grade Material | 1762-2155 potential number of Nuclear Weapons |

¹ Numbers of Weapons and Warheads compiled from the "Cox Report" from the US Congress and "The Military Balance 2003-2005" <u>IISS</u> The information on the amounts of nuclear material comes from the Center for Non-Proliferation Studies "China's Fissile Material Production and Stockpile"

CHINA'S MEDIUM, INTERMEDIATE, AND LONG RANGE BALLISTIC MISSILE

| US Designation | Chinese Designation | Range Mile/ Kilometer | Fuel-Type/ Developed | Estimated Numbers | Warhead Size | Accuracy | Suspected Targets |
|-------------------|------------------------------|-----------------------------|------------------------------|----------------------|--|-------------------------|--|
| CSS-2 | DF-3A (IRBM²) | 1,900-3,000 | liqued- silo/1960 | 60-80 | 1 warhead 700kT- 3mT 3 warheads 50- 100kT | 1,000-4,000 meters | USSR/Russia, US bases in Japan, South Korea, Guam, Diego Garcia |
| CSS-3 | DF-4 (IRBM) | 3,400-4,750 | liqued- silo/1965 | 20-50 | 1 warhead 2-3mT | 1,400 - 3,500 meters | Moscow/Russia, Japan, India, US bases in South Korea, Guam, Diego Garcia |
| CSS-4 | DF-5 (ICBM) | 7,500- 18,000 | liqued- silo/1965 | 24 | 1 warhead 2mT+ | 500-3,500 meters | US Homeland Europe |
| CSS-5 | DF-21 (MRBM) | 1,200-1,800 | solid- mobile/1965 | 60 | 1 warhead 200kT- 1mT | 300-500 meters | Russian Far East, India, South Korea, Japan, South China Sea |
| CSSN-3 | JL-1 (SLBM) | 1,200-1,800 | sub- launched/1967 | 12-24 | 1 warhead 200- 300kt | 300-500 meters | Anywhere the Xia SSBN can travel |
| CSS 9 | DF-31 | 5,000-8,000 | solid- mobile/1984 | 8 | 1-3 warhead ranging from 35kT to 1mT | 300-500 meters~ | Replacement to the DF-4 |
| C-SS-X-5 | DF-21X (improved MRBM) | 1,200-1,800 | solid-mobile / n/a | n/a | n/a | n/a | Improved version of DF- 21 |
| C-SS-N-X-4 | JL-2 | 5,000-8,000 | sub- launched/1984 | n/a | 3-4 warheads 90kT 1 warhead 250kT- 1mT | 500 meters~ | Replacement to the JL-1 |
| C-SS-X-10 | DF-41 | 7,500 | solid-mobile or silo/1984 | n/a | 1 warhead 350kT- 1mT 3-6 warheads 50- 100kT | 700-800 meters~ | Replacement for DF-5 |
| Total | | | | 184-246 | 115-555mT | | |

Italicized represents missiles under development

Sources: Zlamay M. Khalilzad et al. The <u>United States and a rising China: Strategic and Military Implications</u> (RAND, Santa Monica, 1999); "Military Balance 2004-2005" International Institute for Strategic Studies Oxford October 2004; Cox Report op cit.

Accuracy for this table is measured in the missiles Circular Error Probable or the circular area within a around a given target in which at least 50% of missiles fired at that target will fall.

China is currently the only nation in the world that currently posses Intermediate Range Ballistic Missiles (IRBM)

China: Trade With the US, EU, and Japan - Annual Chinese Surplus 1990 - 2004 and Estimates 2005-2025 (in US\$ Billions)

| | 1990 1995 | 1996 2000 | Sub- Total | 2001 | 2002 | 2003 | 2004 | Total | 2005 | 2010 | 2015 | 2025 |
|---|--------------|--------------|---------------|------|------|------|------|-------|------|------|-------|-------|
| Annual Trade Surplus with US | 129 | 297 | 426 | 83 | 103 | 120 | 130 | 862 | 153 | 342 | 766 | 3,844 |
| Annual Trade Surplus with Japan | 43 | 96 | 139 | 27 | 23 | 19 | 16 | 224 | 17 | 22 | 28 | 46 |
| Annual Trade Surplus with EU | 60 | 154 | 214 | 52 | 54 | 72 | 89 | 481 | 98 | 213 | 508 | 2,893 |
| Annual Trade Surplus with US, Japan, and EU | 232 | 547 | 779 | 162 | 180 | 211 | 235 | 1,543 | 259 | 577 | 1,302 | 6,783 |

Military Expenditures 1990 – 2004 and estimates 2005-2025 (in US\$ Billions)

| | 1990 1995 | 1996 2000 | Sub- Total | 2001 | 2002 | 2003 | 2004 | Total | 2005 | 2010 | 2015 | 2025 |
|--|--------------|--------------|---------------|------|------|------|------|-------|------|------|------|-------|
| Chinese figures defense spending | 40 | 55 | 94 | 17 | 20 | 22 | 25 | 178 | n/a | n/a | n/a | n/a |
| US Department of Defense Low Estimate | 119 | 170 | 289 | 40 | 42 | 46 | 50 | 467 | 58 | 75 | 100 | 162 |
| US Department of Defense High Estimate | 171 | 242 | 413 | 56 | 60 | 65 | 70 | 664 | 80 | 112 | 152 | 280 |
| Authors Estimate of Total Chinese Defense Spending | 324 | 472 | 796 | 131 | 147 | 165 | 186 | 1,425 | 209 | 376 | 588 | 1,440 |

Statistics on Japan-China trade sourced from the Japan External Trade Organization http://www.jetro.go.jp, as of August 2001. 1996- 1997 data estimated assuming half the rate of increase in China's surplus, 1995 data in K.R. Holmes and J.J. Przystup, eds. Between Diplomacy and Deterrence (Washington: Heritage Foundation, 1997), 247.

Statistics on EU-China trade sourced from Eurostat http://europa.eu.int/comm/eurostat, as of March 2000. For the year 2000, data has been extrapolated from year 1999.

1998 - 2000 Statistics on United States-China Trade sourced from the US Department of Commerce International Trade in Goods and Services

Report, December 2000, http://www.ita.doc.gov. Earlier US-China trade data from J.T. Dori and R.D. Fisher Jr., Eds.

US and Asia, Statistical Handbook 1997-1998 (Washington: Heritage Foundation, 1997), 43.

Military expenditures from US Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers 1993-1994

(Washington: USGPO, 1995) with extrapolation after 1993 based on the reported annual growth rate of 12%.

A lower estimate produces a cumulative expenditure of \$214 billion for these years from data for 1991 through 1996, cited in Kent Calder, Asia's Deadly Triangle

(London: Breely Publishing, 1997), 140. Estimates made by International Institute for Strategic Studies; estimates for 1990 and 1997 assuming the same rates of growth held. Responsible estimates place PRC military expenditures even higher than the US ACDA numbers given in the chart.

China - The Mao Years, 1949 - 1976

| | Nation | nal Events | | International Events | |
|---------|--|--|--|---|---------|
| | | Estimated Victims | of the Regime | | |
| Date | | Deprivation of Human Rights | Killed | | Date |
| 1949 | October - Communist Party takes control; uses repression to consolidate its power | | 32 to 60 million ³ form 1949 - 1956 | November - China invades Tibet and establishes a Special Autonomous Region. December - Mao visits Stalin for two months. | 1949 |
| 1950 | January - Agrarian Reform - land is taken from 50 million "landlords", distributed to rural population | 30 million ⁴ | 20 million - included above | January - Sino-Soviet Friendship Treaty agreed upon. China intervenes against US forces in Korea with 900,000 troops. | 1950 |
| 1953 | Collectivization of Agriculture and Five-Year Plan begins - land taken from rural population | | | March - Stalin dies | 1953 |
| 1954 | | | | Chinese begins military operations against Quemoy and Matsu. | 1954 |
| 1955 | | | | China proclaims Five Principles of Peaceful Coexistence. | 1955 |
| 1956 | Agricultural Collectivization includes 96% of all peasant households. May: Hundred Flowers Period begins. | | | | 1956 |
| 1957 | June: "Anti-Rightist" campaign | 1 million ⁵ | | Cl.:: | 1957 |
| 1958 | February: Great Leap Forward announced August: Agricultural communes established Resulting mass starvation | | | China increases military operations against Quemoy and Matsu, threatens US fleet. Sino-Soviet differences become very severe; alliance ends 1960. | 1958 |
| 1959-60 | | | 20 - 30 million ⁶ | | 1959-60 |
| 1961 | January: Public criticism of Mao and the Party surfaces. | | | | 1961 |
| 1962 | | | | China invades India | 1962 |
| 1964 | | | | China detonates atomic device - begins producing atomic bombs | 1964 |
| 1966 | November: Communist Party begins the Cultural Revolution. | 100 million non member of the Communist Party ⁷ 3 million Communist Party members ⁸ | | | 1966 |
| 1967 | Mao instructs the military to restore order. | | | China tests hydrogen bomb - begins producing hydrogen bombs | 1967 |
| 1968-76 | Cultural Revolution continues | | | Chinese-Soviet political and military tensions become more severe. Chinese - Soviet Military battles | 1968 |
| 1969 | | | | fought on border region. Chinese concerned about Soviet preemptive strike on its nuclear weapons facilities. | 1969 |
| 1971 | | | | July: Kissinger visits China October: China takes the UN seat from Taiwan | 1971 |
| 1972 | | | | February: Nixon visits China. September: Normalization with the United States and Japan. | 1972 |
| 1973 | | | | Height of Chinese-Soviet military tensions; both prepare for war. | 1973 |
| 1976 | September: Death of Mao. | 124 '11' | (2.00 :11: | | 1976 |
| | Totals | 134 million | 62-90 million | | |

³ Professor Richard L. Walker, for the period 1949 - 1956, as cited Andrew J. Nathan, <u>China's Transition</u> (1997), page 16.

⁴ Kalyani Bandyo Padhyaya, <u>Agricultural Development in China and India</u>,1976, p. 45.

Kalyani Bandyo Paunyaya, <u>Agricultura Developini in China and India, 1776, p. 435.</u>

⁵ C.Y. Hsu, <u>the Rise of Modern China</u>, 5th edition (1995), p. 836.

⁶ John K. Fairbank, <u>China: A New History</u> (1994), p. 690 - 691.

⁷ Estimate in the 1980s by Hu Yao Bang, then General Secretary of the CCP, as cited in Nathan, op. cit. page 16.

| | Asia Pacific Overview of Military Forces | | | | | | | | |
|-------------|--|------------------------|---------------------------------|--|-------------------------------|-----------------------|--|--|--|
| | | | Total Military | | Air Force/ | a | | | |
| Country | Population* | GDP** | 1 ci sonnei | Army ^a | Naval Aviation ^a | Navy ^a | | | |
| | in thousands | millions US \$ 2003 | (Active / Reserve) in thousands | Tanks ^t / Armored Vehicles ^v | Fixed Wing Combat Aircraft | (Principals S / Subs) | | | |
| Japan | 127,333 | 3,567,000 | 239 / 47 | 1,020 / 990 | 270 / 80 | 54 / 16 | | | |
| South Korea | 48,598 | 855,300 | 686 / 4,500 | 1,000 / 2,520 | 538 / 16 | 39 / 20 | | | |
| Philippines | 86,241 | 390,700 | 106 / 131 | 65 / 455 | 44 / 0 | 1 / 0 | | | |
| Australia | 19,913 | 570,300 | 53 / 20 | 101 / 738 | 161 / 0 | 11/4 | | | |
| Indonesia | 238,452 | 758,100 | 302 / 400 | 365 / 634 | 90 / 0 | 17 / 2 | | | |
| Subtotal | 520,537 | 6,141,400 | 1,386 / 5,098 | 1,651 / 3,069 | 1,103 / 96 | 122 / 42 | | | |
| ROC/Taiwan | 22,749 | 528,600 | 290 / 1,657 | 1,831+ / 1,175 | 479 / 32 | 32 / 4 | | | |
| India | 1,065,070 | 3,022,000 | 1,325 / 535 | 3,988 / 2,017 | 744 / 35 | 29 / 19 | | | |
| Total | 1,608,356 | 9,692,000 | 3,001 / 7,290 | 7,470+ / 6261 | 2,326 / 163 | 183 / 65 | | | |
| China | 1,298,847 | 6,670,300 ^b | 2,250 / 600 | 8,680 / 4,500+ | 1,900+ / 700 | 63 / 69 | | | |
| North Korea | 22,697 | 22,850 | 1,082 / 4,700 | 4,060 / 2,500 | 605 / 0 | 3 / 26 | | | |
| Total | 1,321,544 | 6,693,150 | 3,332 / 5,300 | 12,740 / 7,000+ | 2,505+ / 700 | 66 / 95 | | | |

^{*} As of April 2004. U.S. Census Bureau, Population Division, International Programs Center Revised April 30, 2004 http://www.census.gov/ipc/www/idbrank.html

^{**} CIA World Fact book 2004 July 2004 http://www.cia.gov/cia/publications/factbook/index.html All figured are estimates for 2003 as of May 11, 2004 and are expressed in Purchasing Power Parity or PPP

^a The International Institute of Strategic Studies, <u>The Military Balance 2003-2004</u>, (London: Oxford University Press) 2003

b Includes Hong Kong PPP 2003 (US\$212.2 bn) and Macau (US\$ 9.1 bn)

^t Tanks represent the total of both Main Battle Tanks and Light Tanks

Armored vehicles refers to Armored Resonances Vehicles, Armored Fighting Vehicles, and Armored Personnel carriers.

^s Principle refers to surface combat ship such as Aircraft Carriers Cruisers Destroyers and Frigates with a displacement over 1,000 tons and offensive capabilities.

⁸ Estimate by Deng Xiaoping as cited in Nathan, *ibid*.

| Shanghai Cooperation Organization/ "Shanghai Pact" Alliance | | | | | | |
|---|-------------------|-----------------------------|--|--|--|--|
| | Population (000)* | Total Active Armed Forces** | | | | |
| Six members as of September 23, 2003 | | | | | | |
| China | 1,286,975 | 2,255,000 | | | | |
| Russia | 144,526 | 1,212,700 | | | | |
| Tajikistan | 6,863 | 7,600 | | | | |
| Kyrgyzstan | 4,892 | 12,500 | | | | |
| Uzbekistan | 25,981 | 55,000 | | | | |
| Kazakhstan | 16,763 | 65,000 | | | | |
| Mongolia (Observer) | 2,712 | 8,600 | | | | |
| India (Observer) | 1,049,700 | 1,325,000 | | | | |
| Pakistan (Observer) | 150,694 | | | | | |
| Iran (Observer) | 68,278 | 540,000 | | | | |
| Subtotal: | 2,758,000 | 6,100,400 | | | | |
| | | | | | | |
| Potential future members | | | | | | |
| Turkey | 69,661 | 514,850 | | | | |
| Belarus | 10,300 | 72,940 | | | | |
| Turkmenistan | 4,775 | 26,000 | | | | |
| Afghanistan | 29,929 | 90,000 | | | | |
| | | | | | | |
| Subtotal: | 114,665 | 703,790 | | | | |
| | | | | | | |
| Total: | 2,872,665 | 6,804,190 | | | | |

Oxford University Press, 2000

* As of September 2003. U.S. Census Bureau, Population Division, International Programs Center Revised September 23, 2003 http://www.census.gov/ipc/www/idbrank.html

** The Military Balance 2004/05, The International Institute for Strategic Studies,

NATO COUNTRIES DATA FOR 2004

| | GDP (USD Millions)* | Population (00 <u>0)**</u> | Active Duty Military Personnel*** |
|----------------|---------------------|----------------------------|-----------------------------------|
| Belgium | 305,000 | 10,348 | 40,800 |
| Bulgaria | 19,900 | 7,824 | 51,000 |
| Canada | 868,000 | 31,630 | 52,300 |
| Czech Republic | 89,000 | 10,202 | 45,000 |
| Denmark | 211,000 | 5,387 | 21,180 |
| Estonia | 8,400 | 1,350 | 4,980 |
| France | 1,750,000 | 59,725 | 259,050 |
| Germany | 2,400,00 | 82,551 | 321,000 |
| Greece | 174,000 | 10,680 | 170,800 |
| Hungary | 84,000 | 10,120 | 32,300 |
| Iceland | 8,000 | 285 | 0 |
| Italy | 1,470,000 | 57,646 | 194,000 |
| Latvia | 10,200 | 2,321 | 4,880 |
| Lithuania | 18,600 | 3,454 | 13,510 |
| Luxembourg | 26,000 | 448 | 900 |
| Netherlands | 514,000 | 16,215 | 53,130 |
| Norway | 222,000 | 4,560 | 26,600 |
| Poland | 207,000 | 38,195 | 141,500 |
| Portugal | 152,000 | 10,191 | 44,900 |
| Romania | 56,900 | 22,200 | 97,200 |
| Slovakia | 32,700 | 5,381 | 20,195 |
| Slovenia | 27,400 | 1,964 | 6,550 |
| Spain | 842,000 | 41,101 | 150,700 |
| Turkey | 240,000 | 70,712 | 514,850 |
| United Kingdom | 1,800,000 | 59,280 | 207,630 |
| United States | 10,416,818 | 290,342 | 1,433,600 |
| | | | |
| Total | 19,552,918 | 845,112 | 3,908,555 |

^{***} *The Military Balance 2004/05*, The International Institute for Strategic Studies, Oxford University Press, October 2004

PLAN Overview¹

| | | ersonnel | | | |
|---------|--|---|--|---|--|
| | Naval Aviation 26,000 | Marines 10,000 | Conscripts 40,000 | Total Navy 255,000 | |
| | Surface Warfare | Naval Aviation | Submarine | Amphibious | Coastal |
| Systems | Destroyers | Fighters | Diesel Subs (SSK) | Landing Ship Tank | Missile Boats |
| | 2 Hangzhou (Sovremenny) | 200+ J-6 (MIG 19) | 35 Romeo | 15 Yuting* | 38+ Huangfeng / Hola |
| | <u>1 Luhai</u> 2 Luhu | 48 J-8 Finback 26 J-7 (MIG 21) | 19 Ming ^{R M} <u>4 Kilo^M</u> | 7 Yukan 3 Shan (US LST-1) | 30 Houku 20 Houxin |
| | 16 Luda ^M | | 3 Song 1 Wuhan ^R (SSG) | | 5 Huang 16 Hunchuan (<u>Torpedo</u>) |
| Total | 21 Destroyers | 274+ Fighters | 62 Diesel Subs | 25 LST's | 109+ Missile / Torpedo Boats |
| Systems | Frigates | Ground Attack Fighters | Nuclear Subs (SSN) | Landing Ship Medium | Costal Patrol Craft |
| | 30 Jianghu ^M 8 Jiangwei II 4 Jiangwei I | 30+ Q-5 (MIG 19) 20 JH-7 (MIG 21) | 5 Han | 22 Yuliang 13 Yuhai 1 Yudeng 1 Yudao | 96 Hainan 20 Haiqing 2 Haijui |
| Total | 42 Frigates | 50+ Ground Attack Fighters | 5 Nuclear Attack Subs | 37 Landing Ship Medium | 118 Costal Patrol Craft |
| Systems | Merchant Fleet | Bombers | Ballistic Missile Subs (SSBN) | Landing Craft | Inshore Patrol Craft |
| | 298 Tanker Ships 555 Dry Bulk | 50 H-5 Medium (IL- 28 Beagle) 18 H-6D Strategic | 1 Xia 1 Golf SSB (testing vessel) | 275+ LCU 10 LCAC | 100 Shanghai 11 Haizhui |
| | 191 Container 913 Other | (TU-16 Badger) | | (Hover Craft) | |
| Total | 1,954 Merchant Vessels | 68 Bombers | 1 Operational SSBN 1 Test vessel SSB | 285+ Small Landing craft | 111 Inshore Patrol Vessels |
| | | Ma | rine Forces** | | |
| | Brigades of 1 Ir AN Marines 1 Air | 1 Armored l 2 Artillery B | | | |

¹ Unless otherwise noted all figures come from: The International Institute for Strategic Studies, "The Military Balance 2004-2005" Oxford, England October 2004 **Bold represents Russian or Soviet produced Equipment**

Italics represents Systems known to be nuclear capable
* Number of units from www.globalsecurity.org

R Modified versions of Romeo Class Submarines

Multiple Variations within the same class

^{**} In addition to the regular Marine forces of the PLAN there are at least 3 PLA divisions that are trained and equipped for amphibious operations this represents an approximately 35,000 additional troops available for marine operations.